

WE CLAIM:

1. A frozen dairy product comprising on a weight basis:
from about 10% to about 13% of milk solids non-fat;
from about 4% to about 16% of milk fat;
from about 5% to about 10% of sucrose;
from about 2% to about 8% of corn syrup having a DE of about
5 36;
from about 4% to about 12% of dextrose;
from about 0% to about 1.5% of starch; and
from about 0.2% to about 1.0% of stabilizer, with the balance
10 being water.
2. The frozen dairy product of claim 1 wherein said frozen dairy product has an overrun of about 200%.
3. The frozen dairy product of claim 1 wherein said frozen dairy product is soft and scoopable at temperatures from about 0°F to about 5°F.
4. The frozen dairy product of claim 1 wherein said stabilizer is selected from the group consisting of locust bean gum, guar gum, and carrageenan.
5. The frozen dairy product of claim 1 wherein said starch is a modified starch.
6. The frozen dairy product of claim 1 further comprising from about 0% to about 3.5% of a liquid flavor ingredient.
7. The frozen dairy product of claim 1 wherein said milk solids non-fat are present in an amount from about 10% to about 13%,

5 said milk fat is present in an amount from about 5% to about 16%, said sucrose is present in an amount from about 5% to about 8%, said corn syrup is present in an amount from about 3% to about 6%, said dextrose is present in an amount from about 5% to about 9%, said starch is present in an amount from about 0% to about 1.5%, and said stabilizer is present in an amount from about 0.2% to about 1.0%, with the balance being water.

8. The frozen dairy product of claim 1 wherein said milk solids non-fat are present in an amount from about 10% to about 13%, said milk fat is present in an amount from about 5% to about 10%, said sucrose is present in an amount from about 5% to about 10%, said corn syrup is present in an amount from about 2% to about 4%, said dextrose is present in an amount from about 4% to about 10%, said starch is present in an amount from about 0.5% to about 0.75%, and said stabilizer is present in an amount from about 0.65% to about 1.0%, with the balance being water.

5 9. The frozen dairy product of claim 1 wherein said milk solids non-fat are present in an amount from about 10% to about 13%, said milk fat is present in an amount from about 5% to about 10%, said sucrose is present in an amount from about 5% to about 10%, said corn syrup is present in an amount from about 4% to about 8%, said dextrose is present in an amount from about 4% to about 12%, said starch is present in an amount from about 0.5% to about 1.5%, and said stabilizer is present in an amount from about 0.65% to about 1.0%, with the balance being water.

10. The frozen dairy product of claim 8 wherein a portion of said milk solids non-fat are cultured with bacteria.

11. The frozen dairy product of claim 10 wherein said bacteria are selected from the group consisting of *Lactobacillus acidophilus*,

Bifidobacterium longum, *Streptococcus salivarius* subsp. *thermophilus*, and *Lactobacillus delbrueckii* subsp. *bulgaricus*.

12. The frozen dairy product of claim 1 wherein said milk solids non-fat are present in an amount from about 10% to about 13%, said milk fat is present in an amount from about 4% to about 10%, said sucrose is present in an amount from about 5% to about 7%, said corn syrup is present in an amount from about 2% to about 6%, said dextrose is present in an amount from about 4% to about 10%, said starch is present in an amount from about 0.65% to about 1.0%, said stabilizer is present in an amount from about 0.65% to about 1.0%,
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said frozen dairy product further comprising from about 1.4% to about 2.0% of egg yolk, with the balance being water.
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13. A method for producing a frozen dairy product comprising the steps of:

heating water to a temperature from about 120°F to about 130°F;
adding to said water sucrose, corn syrup having a DE of about 36,
5 dextrose, starch, and stabilizer to form a first mixture;
agitating said first mixture;
adding to said first mixture milk solids non-fat and milk fat to form a final mixture;
agitating said final mixture;
10 pasteurizing and homogenizing said final mixture;
aerating, extruding, and packaging said final mixture; and
hardening said final mixture at about -30°F.

14. The method of claim 13 wherein said pasteurizing step comprises:

heating said final mixture between about 180°F and about 200°F with a hold time of about 30 seconds to about 120 seconds;
5 regenerating; and

cooling to 40°F.

15. The method of claim 13 wherein said pasteurizing step comprises:

heating said final mixture between about 165°F and about 170°F for about 30 minutes;

5 regenerating; and

cooling to 40°F.

16. The method of claim 13 wherein said homogenizing step comprises:

a first stage performed at about 500 psi to about 1,500 psi; and

5 a second stage following said first stage, said second stage

performed at about 2,000 psi to about 5,000 psi.

17. The method of claim 13 wherein said aerating step produces an overrun of about 200%.

18. The method of claim 13 wherein said frozen dairy product is soft and scoopable from about 0°F to about 5°F.

19. The method of claim 13 wherein said stabilizer is selected from the group consisting of locust bean gum, guar gum, and carrageenan.

20. The method of claim 13 wherein said starch is a modified starch.

21. The method of claim 13 further comprising the step of adding from about 0% to about 3.5% of a liquid flavor ingredient to said final mixture.

22. The method of claim 13 wherein said final mixture comprises on a weight basis:

from about 10% to about 13% of said milk solids non-fat;
from about 4% to about 16% of said milk fat;
from about 5% to about 10% of said sucrose;
from about 2% to about 8% of said corn syrup;
from about 4% to about 12% of said dextrose;
from about 0% to about 1.5% of said starch; and
from about 0.2% to about 1.0% of said stabilizer, with the balance

10 being said water.

23. The method of claim 22 wherein said final mixture comprises:

from about 10% to about 13% of said milk solids non-fat;
from about 5% to about 16% of said milk fat;
from about 5% to about 8% of said sucrose;
from about 3% to about 6% of said corn syrup;
from about 5% to about 9% of said dextrose;
from about 0% to about 1.5% of said starch; and
from about 0.2% to about 1.0% of said stabilizer, with the balance

10 being said water.

24. The method of claim 22 wherein said final mixture comprises:

from about 10% to about 13% of said milk solids non-fat;
from about 5% to about 10% of said milk fat;
from about 5% to about 10% of said sucrose;
from about 2% to about 4% of said corn syrup;
from about 4% to about 10% of said dextrose;
from about 0.5% to about 0.75% of said starch; and
from about 0.65% to about 1.0% of said stabilizer, with the
balance being said water.

25. The method of claim 22 further comprising the step of adding egg yolk to said first mixture.

26. The method of claim 25 wherein said final mixture comprises:

from about 10% to about 13% of said milk solids non-fat;

5 from about 4% to about 10% of said milk fat;

from about 5% to about 7% of said sucrose;

from about 2% to about 6% of said corn syrup;

from about 4% to about 10% of said dextrose;

from about 0.65% to about 1.0% of said starch;

from about 0.65% to about 1.0% of said stabilizer; and

10 from about 1.4% to about 2.0% of said egg yolk, with the balance being said water.

27. A method for producing frozen dairy products comprising the steps of:

(i) preparing a culture mixture by:

heating water to a temperature from about 120°F to about 130°F;

5 adding milk solids non-fat to said heated water to form a first mixture;

pasteurizing said first mixture;

cooling said first mixture to about 110°F;

adding bacteria to said first mixture with agitation for about 30 minutes;

10 incubating said first mixture at about 110°F for about 2 hours to about 6 hours until said first mixture reaches about 1.10 titratable acidity;

(ii) preparing a sugar mixture by:

15 heating water to a temperature from about 120°F to about 130°F;

adding milk solids non-fat, milk fat, sucrose, corn syrup having a DE of about 36, dextrose, starch, and stabilizer to said heated water with agitation to form a second mixture;

pasteurizing said second mixture;

20 (iii) blending said culture mixture with said sugar mixture to form a final mixture;

(iv) aerating, extruding, and packaging said final mixture; and

(v) hardening said final mixture at about -30°F.

28. The method of claim 27 wherein said culture mixture is blended with said sugar mixture in a 32.5%/67.5% volume/volume ratio.

29. The method of claim 27 wherein said bacteria are selected from the group consisting of *Lactobacillus acidophilus*, *Bifidobacterium longum*, *Streptococcus salivarius* subsp. *thermophilus*, and *Lactobacillus delbrueckii* subsp. *bulgaricus*.

30. The method of claim 27 wherein said final mixture comprises:

from about 10% to about 13% of said milk solids non-fat;

from about 5% to about 10% of said milk fat;

5 from about 5% to about 10% of said sucrose;

from about 4% to about 8% of said corn syrup;

from about 4% to about 12% of said dextrose;

from about 0.5% to about 1.5% of said starch; and

from about 0.65% to about 1.0% of said stabilizer, with the

10 balance being said water.

31. The method of claim 30 wherein a portion of about 5% to about 10% of said about 10% to about 13% milk solids non-fat is added to said water to form said first mixture.

32. A method for producing a frozen dairy product comprising the steps of:

- heating water to a temperature from about 120°F to about 130°F;
- agitating said water;
- 5 adding to said water sucrose, corn syrup having a DE of about 36, dextrose, starch, and stabilizer to form a first mixture;
- agitating said first mixture;
- adding to said first mixture milk solids non-fat and milk fat to form a final mixture;
- 10 agitating said final mixture;
- pasteurizing and homogenizing said final mixture, said homogenizing step having a first stage performed at about 500 psi to about 1,500 psi and a second stage following said first stage, said second stage performed at about 2,000 psi to about 5,000 psi;
- 15 aerating, extruding, and packaging said final mixture, said aerating step providing an overrun of about 200%; and
- hardening said final mixture at about -30°F.

33. The method of claim 32 wherein said pasteurizing step comprises:

- heating said final mixture between about 180°F and about 200°F with a hold time of about 30 seconds to about 120 seconds;
- 5 regenerating; and
- cooling to 40°F.

34. The method of claim 32 wherein said pasteurizing step comprises:

- heating said final mixture between about 165°F and about 170°F for about 30 minutes;
- 5 regenerating; and
- cooling to 40°F.